

Memorandum

*Flex your power!
Be energy efficient!*

To: ROBERT COPP
Chief
Division of Traffic Operations

Date: September 25, 2009

File: P3000-383

ORIGINAL SIGNED BY:

From: GERALD A. LONG
Deputy Director
Audits and Investigations

Subject: Final Report – Division of Traffic Operations Program Evaluation

Attached is the final report of Audits and Investigations' program evaluation of the Division of Traffic Operations. Your response has been included as part of our final report. This report is intended for your information and Department Management. As a matter of public record, the report will be included on the Reporting Transparency in Government Web site.

Please provide our office with status reports on the implementation of your audit finding dispositions 60, 180, and 360 days subsequent to the report date. If all findings have not been corrected within 360 days, please continue to provide status reports every 180 days until the audit findings are fully resolved.

We thank you and your staff for their assistance provided during this evaluation. If you have any questions or need additional information, please call Laurine Bohanera, Chief, Internal Audits, at (916) 323-7107, or me at (916) 323-7122.

Attachment

c: Randell H. Iwasaki, Director
Cindy McKim, Chief Deputy Director (Interim)
Michael Miles, Deputy Director, Maintenance and Operations
Brenda Schimpf, Proposition 1B Bond Program Manager (Interim)
Laurine Bohanera, Chief, Internal Audits, Audits and Investigations
John Wolf, Assistant Chief, Division of Traffic Operations
Asif Haq, Assistant Chief, Division of Traffic Operations
David Lively, Chief, Office of Systems Management Planning, Division of Traffic Operations
Barry Leaming, Chief, Office of Project Delivery and Accountability, Division of Local Assistance

P3000-383
Division of Traffic Operations Program Evaluation Report
September 2009

Gerald A. Long
Deputy Director
Audits and Investigations
California Department of Transportation

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Summary

Audits and Investigations (A&I) has completed a program evaluation of the Department of Transportation's (Department) Division of Traffic Operations (Traffic Ops). The purpose of the program evaluation was to evaluate Traffic Ops' internal controls to determine whether policies, procedures, and processes are in place to meet selected program requirements. Specifically, we reviewed the Traffic Light Synchronization Program (TLSP) policies and procedures, with particular emphasis on the Proposition 1B requirements, which Traffic Ops manages with assistance from the Division of Local Assistance (DLA). In addition, we followed-up on a prior audit finding related to encroachment permits to determine if corrective action had been taken.

Our program evaluation disclosed that the Department's internal controls with respect to Traffic Ops and TLSP are generally adequate, except for the following issues:

- Improvement Needed in Oversight of TLSP.
- Encroachment Permit Manual Needs to be Updated with Standard Hourly Rates (SHR) and Guidelines.

Background

Traffic Ops has approximately 1,500 employees located throughout the State and an annual budget of almost \$182 million. Traffic Ops is responsible for the safe and efficient operation of a highway system comprised of 48,000 lane miles and seven toll bridges. Traffic Ops consists of ten offices: Systems Management Planning; Systems Management Operations; District Liaison; Intelligent Transportation Systems Projects and Standards; Traffic Safety; Encroachment Permits and Outdoor Advertising; Truck Services; Strategic Highway Safety Plan; High Occupancy Vehicle Lanes and Budgets and Administration. Traffic Ops focuses on two key departmental goals; **Safety**—to provide the safest transportation system in the nation for users and workers and, **Mobility**—to optimize transportation system throughput and provide dependable travel times. Responding to incidents, issuing permits, performing safety investigations, operating Traffic Management Centers, programming safety projects, managing high occupancy vehicle lanes, operating ramp meters, collecting traffic data, completing speed zone surveys, and planning to improve traffic flow in corridors are a few of the activities performed by Traffic Ops.

The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by the voters as Proposition 1B on November 7, 2006, included a \$250 million program to fund traffic light synchronization projects and other technology-based improvements to improve safety, operations and the effective capacity of local streets and roads.

**Background
(Continued)**

In 2007, the Legislature enacted implementing legislation, Senate Bill (SB) 88 that designated the California Transportation Commission (CTC) as the administrative agency responsible for programming TLSP funds and the agency authorized to adopt guidelines for the program. SB 88 directed that \$150 million of the \$250 million TLSP funds be allocated to any city with a population of over 3.5 million people. Los Angeles was the only city that qualified to receive this allocation. The TLSP guidelines state that the City of Los Angeles is only required to submit one application and baseline agreement for the entire \$150 million. The Department is the sponsoring agency for this bond program, with the construction costs paid by and reimbursed to local implementing agencies. Traffic Ops acts as program manager for TLSP, with assistance from DLA for project implementation.

**Objectives,
Scope, and
Methodology**

We performed this program evaluation in accordance with the International Standards for the Professional Practice of Internal Auditing. The objectives were:

- To determine whether Traffic Ops has clearly defined roles and responsibilities.
- To assess compliance with applicable policies and procedures with particular emphasis on Proposition 1B requirements.
- To assess Traffic Ops' compliance with the Memorandum of Understanding (MOU) over the TLSP between DLA and Traffic Ops.
- To determine if corrective action had been taken on a prior encroachment permit audit finding.

To achieve the objectives, we performed the following:

- Interviewed Traffic Ops' management to gain an understanding of its roles and responsibilities within the Department.
- Reviewed policies and procedures applicable to TLSP including SB 88, SB 1266, Governor's Executive Order S-02-07, and the TLSP program guidelines, which were adopted by the CTC.
- Reviewed and evaluated the MOU between Traffic Ops and DLA.
- Interviewed and discussed TLSP process and guidelines with appropriate individuals.
- Performed a walkthrough of a project from the application through the Baseline Agreement.
- Performed follow-up work related to the prior audit finding.

Conclusion

Our program evaluation disclosed that Traffic Ops has clearly defined roles and responsibilities that agree with the Department's mission of safety and mobility and that the TLSP has guidelines and procedures. However, we noted the following issues:

- Improvement Needed in Oversight of TLSP.
- Encroachment Permit Manual Needs to be Updated with SHR and Guidelines.

Traffic Ops should address the deficiencies outlined in the bullets above, and in more specific detail, in the findings and recommendations section of this report.

**Views of
Responsible
Officials**

We requested and received a response from the Chief of the Division of Traffic Operations. This official has, in general, acknowledged the findings and recommendations. Please see the Attachment for the complete response.

ORIGINAL SIGNED BY:

GERALD A. LONG
Deputy Director
Audits and Investigations

December 11, 2008
(Last Day of Field Work)

FINDINGS AND RECOMMENDATIONS

Finding 1 – Improvement Needed in Oversight of Traffic Light Synchronization Program

Improvement is needed in the oversight of the Traffic Light Synchronization Program (TLSP) to ensure that program objectives are met, and that individual projects remain within their identified scope and cost and are delivered within the specified timeframe.

A. We found that 73 percent (46/63) of project Baseline Agreements do not have sufficient project scope descriptions to determine the specific location and/or precise project scope of the TLSP projects. To illustrate, examples of two baseline agreement descriptions are noted below:

- The TLSP funds will improve traffic safety and integrate signals on ten major corridors into the City's new Advanced Transportation Management System. The proposed improvements will include installation of advance detections, expansion of communication systems, and upgrade of field equipment.
- The TLSP grant addresses the citywide needs to optimize and synchronize the traffic signals along the City's major and secondary arterial roadways. This effort will apply a traffic signal optimization model to reduce delay by improving vehicular progression, as well as revisiting pedestrian crossing time intervals.

In the examples cited above, the baseline agreements do not provide a clear and definitive project scope that can be measured against both cost and expected outcome.

The Governor's Executive Order S-02-07 states, "Each department shall document what ongoing actions it will take to ensure that the infrastructure projects or other permissible activities funded from bond proceeds are staying within the scope and cost that were identified when the decision was made to fund the project or activity."

In addition, the TLSP Guidelines, Section 5, dated February 14, 2008, state project applications and their supporting documentation, which includes the Baseline Agreement, should include a brief narrative that provides a concise description of the project scope proposed for TLSP funding; a description of the transportation corridor and the function of the proposed project within the corridor. The

**Finding 1
(Continued)**

description should also detail the location that describes the project scope.

We found that the TLSP Program Manager was new to the position and was under a deadline to complete the review of the Baseline Agreements. As a result, he did not have sufficient time to evaluate the project scope detail included in the Baseline Agreements. Without adequate scope descriptions, the State could be funding work that was not within the TLSP project limitations, resulting in inappropriate use of State bond funds. In addition, it may be difficult to ensure that a project is remaining within scope and cost as required by the Executive Order.

- B. The review and approval process for reimbursing local implementing agencies needs improvement. The current process for reimbursing local implementing agencies for TLSP project costs is by submitting interim invoices directly to Caltrans' Division of Accounting (DofA) for payment, without prior review and approval by TLSP program staff. Instead, only the final invoice and delivery report will be submitted to TLSP program staff for their review and approval prior to payment.

The State Administrative Manual (SAM), Section 8422.1 provides that prior to payment, the agency will determine that items or services involved have been received or provided. In addition, the DofA Accounting Manual Chapter 12, Section 2.08, Receiving Policy states, "The essential aspects of receiving are : 1) Acknowledgement of delivery and receipt of goods or services; and 2) Acceptance, authorization for payment, preparation, and submission of receiving documentation to the Division of Accounting. Where acceptance is performed by someone other than the person taking delivery, the accountability for complete and timely receiving documentation is ultimately with the Caltrans staff who approved the purchase and obligated departmental resources. Caltrans receiving staff shall accurately verify the receipt of materials and performance of services by vendors."

Without prior review and approval by the responsible TLSP staff, there is no assurance that invoices paid contain allowable project costs that are within the cost and scope of TLSP projects as required by the Executive Order.

**Finding 1 –
(Continued)**

- C. Finally, procedures for the closeout audit process have not been established by the program. As a result, closeout audits of the TLSP projects might not be performed on a timely basis if the close-out procedures have not been implemented. The TLSP guidelines adopted by the California Transportation Commission (CTC) states, “The Department will ensure that project expenditures and outcomes are audited. For each TLSP project, the CTC expects the Department to provide a semi-final audit report within 6 months after the final delivery report, and a final audit report within 6 months after the final delivery report supplement. The Commission may also require interim audits at any time during the performance of the project.”

Recommendation

We recommend that:

- The Baseline Agreements, Request Form (Attachment A) Section, be rewritten with sufficient scope detail to delineate concise corridor descriptions and more precise project scope of the TLSP projects.
- Ongoing invoices submitted by local implementing agencies be reviewed and approved by the responsible TLSP staff prior to payment to ensure only allowable costs are authorized.
- The TLSP Program Manager coordinate with Audits and Investigations to perform closeout audits of projects and determine the documents necessary for the auditors to review prior to performing the audit.

**Division of Traffic
Operations’
Response**

Traffic Ops has developed a workplan to address our recommendations. Please see Attachment for the workplan.

**Finding 2 -
Encroachment
Permit Manual
Needs to be
Updated with
Standard Hourly
Rates and
Guidelines**

As of September 22, 2008, Traffic Ops had not updated the Encroachment Permit (EP) Manual with current Standard Hourly Rates (SHR) and guidelines for calculating the SHR. Our prior audit report, Encroachment Permits (P3000-365), dated December 20, 2006, found that the Department lacked written procedures for calculation and implementation of the SHR that reflect current practice. Traffic Ops did not address the recommendation regarding incorporating formalized guidelines in the calculation and approval of the SHR into the EP Manual.

SAM Section 8752, Full Cost Recovery Policy, requires, “that all departments recover full costs whenever goods or services are provided for others, regardless of funding sources, except where statutes prohibit

**Finding 2 –
(Continued)**

full cost recovery.” Good business practices include evaluating the SHR rate on an annual basis to adjust for annual cost changes.

The Department may under- or over-recover actual incurred costs for fee permits issued when the rate is not reviewed and adjusted annually for cost increases or decreases.

Traffic Ops has not allocated the resources to update the EP Manual. High turnover in the Traffic Ops’ budgets and administration office has delayed the division’s formalization and approval process for the SHR.

Recommendation

We recommend that Traffic Ops finalize the SHR process to implement formal guidelines for calculating and approving the SHR and document these guidelines in the EP manual. In addition, to determine if any changes are required, Traffic Ops should implement an annual review and adjustment of the SHR, as appropriate.

**Division of Traffic
Operations’
Response**

Traffic Ops has developed a workplan to finalize the SHR and update the EP Manual by March 2010. Please see Attachment for the workplan.

Audit Team

Laurine Bohamera, Chief, Internal Audits
Kevin Yee, Audit Supervisor
David Wong, Auditor
Laddavanh Southiyanon, Auditor
Marie Salvacion, Auditor

ATTACHMENT

DIVISION OF TRAFFIC OPERATIONS' RESPONSE TO THE DRAFT REPORT

Memorandum

*Flex your power!
Be energy efficient!*

To: GEARLD A. LONG
Deputy Director
Audits and Investigations
ORIGINAL SIGNED BY:
From: ROBERT COPP
Chief
Division of Traffic Operations

Date: September 17, 2009

Subject: Division of Traffic Operations Program Evaluation

Attached is the Division of Traffic Operations response to your August 2009 Division of Traffic Operations Program Evaluation Report. The attached response is in the form of a workplan and details the specific steps to be taken, time frame involved, and the responsible Office Chief to implement the recommendations in report.

If you have any questions on the workplans or need additional information please contract the appropriate Office Chief shown in the workplans.

Attachments

Workplan

Traffic Light Synchronization Program Audit Findings

2009 11 19 932

Office Chief: David Lively, (916) 653-4575

I. Finding 1 – Baseline Agreement Scopes of Work

- A. Send copies of TLSP project applications for projects currently under construction to Audits (Douglas Gibson) – *David Van Dyken: Completed September 7, 2009.*
- B. Review and determine to see where additional project scope information is required and identify appropriate resolution. – *Douglas Gibson: 3 weeks.*
- C. Modify TLSP projects where modification is required by either
 - 1. Write a side letter
 - 2. Create an addendum to the baseline agreement
 - 3. Prepare a baseline agreement amendment for CTC approval– *David Van Dyken: November 1, 2009.*
- D. Repeat Steps A-C every three months as projects begin construction through December 2010. TLSP agreement modifications will be timed with the publishing of the Proposition 1B Quarterly Report. – *David Van Dyken*

II. Finding 2 – Invoices for TLSP Projects

- A. Determine the Local Assistance invoice and review procedures are the same as the TLSP. – *David Van Dyken. Completed September 7, 2009.* Local Assistance invoice procedures are subject to an audit currently underway. As TLSP projects are managed by District Local Assistance, invoices will be consistent with other Local Assistance invoice review practices.
- B. Meet monthly with Audits (Kevin Yee) to monitor the progress of the Local Assistance audit. – *David Van Dyken*
- C. Conform the TLSP invoicing processes to the findings of the Local Assistance audit. – *David Van Dyken, Barry Leaming (Local Assistance)*

III. Finding 3 – Documentation for TLSP Project Closeout Audits

- A. Determine functional requirements for TLSP project closeout. – *David Van Dyken: October 1, 2009.*
- B. Circulate draft closeout form and procedures for review and comment by stakeholders. – *David Van Dyken, Brenda Schimpf, Douglas Gibson: October 15, 2009.*
- C. Make edits and publish to local agencies. – *David Van Dyken: November 1, 2009.*

Workplan

Encroachment Permit Manual Updating based on audit findings

Office Chief: Don Fogle, (916) 654-4551.

Finding 2 – Encroachment permit (EP) manual needs to be updated with standard hourly rates (SHR) and Guidelines

Recommendation: Finalize the SHR process to implement formal guidelines for calculating and approving the SHR and document these guidelines in the EP Manual. In addition, to determine if any changes are required, Traffic Operations should implement an annual review and adjustment of the SHR, as appropriate.

Action Items:

- A. Work with the Division of Accounting (Accounting) to revise the method used to determine the SHR. – EP Branch Chief and Accounting, by November 1, 2009.
- B. Establish an annual SHR review process to ensure the SHR is updated annually – EP Branch Chief and Accounting, by January 1, 2010.
- C. Work with Accounting to determine when the annual revision should occur each year. Should it align with the calendar year or fiscal year? – EP Branch Chief, by January 1, 2010.
- D. Document the SHR calculation in the EP Manual – EP Branch Chief, by March 1, 2010.
- E. Charge applicants the SHR when application review and permit inspection fees are charged. Projects sponsored by public corporations are exempt from these fees. Create guidance regarding the revised SHR and share with District Permit Engineers – EP Branch Chief, by June 1, 2010.